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EXAMINER

KLING, CHARLES

ART UNIT	PAPER NUMBER
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1711

NOTIFICATION DATE	DELIVERY MODE
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03/08/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/581,245	Applicant(s) SCHERINGER ET AL.	
	Examiner Charles W. Kling	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendments and arguments received 12-27-10.
2. Claims **1, 3-5, 7-16** are pending.
3. Claims **2, 6** were cancelled in the amendment dated 12-27-10.
4. Claims **1-16** were rejected in the previous action.

Response to Amendments

Drawings

5. Examiner acknowledges applicant's amendment to the drawings. The replacement sheet(s) depicting **figure 1** is accepted by the examiner. It has been determined that no new matter has been entered.
6. The objection to the drawings in the previous action is hereby withdrawn.

Specification

7. Examiner acknowledges applicant's amendment to claim **1**. It has been determined that no new matter has been entered.
8. The objection to the specification in the previous action is hereby withdrawn.

Claim Rejections - 35 USC § 112

9. Examiner acknowledges applicant's amendment to claim **1**. It has been determined that no new matter has been entered.

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10. The rejection of claims 1-16 under 35 USC 112, 1st paragraph, in the previous action is hereby withdrawn.

11. Examiner acknowledges applicant's amendment to claims **13, 16**. It has been determined that no new matter has been entered.

12. The rejection of claims 13, 16 under 35 USC 112, 2nd paragraph, in the previous action is hereby withdrawn. However, these claims are newly rejected under 35 USC 112, 2nd paragraph, as stated below.

Other Amendments

13. Examiner acknowledges applicant's amendments to claims **1, 3-4, 9-11, 14-16**; and the cancellation of claims **2, 6**. It has been determined that no new matter has been entered.

Response to Arguments

14. Applicant has amended claim **1**, significantly changing the claim language and scope. Additionally, limitations similar to those in cancelled claim 2 have been added to claim 1.

15. Regarding amended claim **1**, applicant contends that the cited reference, PILZ (DE 30 19 922), does not teach all of the amended claim limitations.

16. This argument has been fully considered but is moot in view of the new ground(s) of rejection.

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17. Regarding amended claim **1** and cancelled claim **2**, applicant contends that a combination of the cited references, PILZ and WEIHE (US 3,598,131), would result in a gross alteration of the fundamental architecture of the primary reference.

18. This argument has been fully considered but it is not persuasive.

19. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

20. In this case, the cited secondary reference, WEIHE, is being relied upon for a teaching of a steam collection system of a dishwasher being placed near the inlet of the dishwasher, where it is upstream from the washing, rinsing, and drying operations of the dishwasher. The use of such an arrangement is known in the art and motivated by a desire for reduced humidity in the washing room, as shown and taught by WEIHE.

21. As such, claim 1 stands rejected, as stated below.

22. Applicant's amendment has necessitated a new ground of rejection for claim 1, as stated below.

23. Regarding claims **3-5, 12-13**, applicant contends that the cited tertiary reference, RAGO ET AL. (US PG-Pub 2005/0072019), is non-analogous art.

24. This argument has been fully considered but it is not persuasive.

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25. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

26. In this case, while RAGO ET AL. is not directly in the field of applicant's endeavor, it is reasonably pertinent to the particular problem with which the applicant is concerned. Specifically, RAGO ET AL. is concerned with pivoting nozzles that are used for drying, which are comparable to applicant's recited pivotable exit nozzles that are used for drying.

27. As such, claims 3-5, 12-13 stand rejected, as stated below.

28. Regarding claims **3-5, 7-16**, applicant contends that these dependent claims are allowable based on the argument that the independent claim is allowable.

29. This argument has been fully considered but it is not persuasive.

30. As stated above, applicant's arguments regarding independent claim 1 are moot or not persuasive. As such, claims 3-5, 7-16 stand rejected, as stated below and in the previous action.

Claim Rejections - 35 USC § 112

31. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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32. Claims **4-5, 7-8, 10, 12-16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

33. With regard to claims **4, 12-13, 15-16**: The limitation "the exit nozzles" is recited in lines 3, 1-2, 1-2, 5, 2, respectively. There is insufficient antecedent basis for this limitation in the claims. For the purposes of examination this claim element has been taken to mean "the pivotable exit nozzles", as recited in line 2 of claim 3.

34. With regard to claim **4**: The limitation "the air stream" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. There are three different "air streams" recited in claim 1, it is unclear which "air stream" this limitation is referring to. For the purposes of examination this claim element has been taken to mean "an air stream".

35. With regard to claim **5**: The limitation "the pivotably arranged exit nozzles" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "the pivotable exit nozzles".

36. With regard to claim **7**: The limitation "the region" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "a region".

37. With regard to claim **7**: The limitation "the nozzles" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "nozzles".

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38. With regard to claims **10, 14**: The limitation "the fan" is recited in lines 2 and 3 of each claim. There is insufficient antecedent basis for this limitation in the claims. For the purposes of examination this claim element has been taken to mean "the motor-driven fan", as recited in line 14 of claim 1.

39. With regard to claim **14**: The limitation "the fan" is recited in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "the speed-regulated fan".

40. With regard to claim **16**: The limitation "the hot air" is recited in line 4. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "the heated air", as recited in line 5 of claim 1.

41. With regard to claims **5, 8, 12, 16**: Dependent claims are indefinite, for at least the same reason(s), when they depend from an indefinite claim.

Claim Rejections - 35 USC § 103

42. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

43. The elements of the claims are anticipated, disclosed, and/or taught by the relevant prior art as cited in parenthesis and bold type.

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44. Claims **1, 3, 7-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ (DE 30 19 922) (see English Abstract and Machine Translation made of record 07-27-10 and attached English Translation) in view of WEIHE (US 3,598,131).

45. With regard to claim **1**: PILZ discloses a commercial dish washer system (**title**) that includes a washing zone (**element 3 of figure 4**); a rinsing zone (**element 4 of figure 4**); a drying zone (**elements 5-6, 8 of figure 4**); a blower (corresponding to the means to produce heated air) (**element 11 in figure 4**); air intake openings that can accommodate air streams at the inlet and exit; a suction-extraction location disposed upstream from the drying zone (**elements 14, 151 of figure 4**); and a motor-driven blower communicating with the interior of the dishwasher at the suction-extraction location (**element 14 of figure 4**); wherein a heated air stream moves counter to the direction of the conveyor (**air flow stream shown moving counter to the conveyor direction in the vicinity of elements 6-8 in figure 4**).

46. PILZ does not appear to explicitly/expressly disclose the suction-extraction location being upstream from the washing and rinsing zones.

47. However, WEIHE discloses a steam collection system for dishwashing machines that includes a suction-extraction device (**element 65 of figure 1**) in the region of the dishwasher inlet (**as shown in figure 1**) which is upstream from the washing and rinsing areas.

48. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ to include the suction-extraction device location of WEIHE, since locating a suction-extraction device near the

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inlet would serve to reduce the humidity in the room, as taught by WEIHE (**abstract**), and since it has been held that the mere rearrangement of parts, which are known in the art, involves only routine skill in the art (see *In re Japikse*, 86 USPQ 70).

49. With regard to claim 3: PILZ discloses a drying fan (**element 11 of figure 4**) being arranged in the drying zone. PILZ also discloses the nozzles of the drying fan being adjusted to preferred angles of 30° to 75° to optimize the heat recovery of the machine (**lines 22-27 of page 2 of the machine translation**). This angle adjustment functionality would require the nozzle to be pivotable.

50. With regard to claims 7-8: PILZ discloses a horizontal deflecting surface beneath a blower nozzle, running beneath the conveyor in the drying zone (**air shown deflecting off surface above element numbers 9-10 in figure 4**).

51. With regard to claim 9: PILZ discloses a curtain (**right most element 9 of figure 4**) on the outlet side of the dishwasher that bounds an air intake opening (**curtain shown directing air in figure 4**).

52. With regard to claim 10: PILZ discloses a heat pump (**element 151 of figure 4**) with an exhaust fan (**element 14 of figure 4**) that recovers heat from the exhaust air (**abstract**). The capacity of this exhaust fan would be directly related to the quantity of air pulled from the drying zone (**as shown by air flow arrows in figure 4**).

53. With regard to claim 11: PILZ discloses the air stream extracted by the exhaust fan (**element 14 of figure 4**) corresponding to external air streams which are taken via intake openings (**as shown in figure 4**).

54. Further, this limitation is inherent; air out would necessarily correspond to air in.

55. Claims **3-5, 12-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ and WEIHE as applied to claims 1, 3, 7-11 above, and further in view of RAGO ET AL. (US PG-Pub 2005/0072019).

56. With regard to claim **3**: PILZ discloses a drying fan (**element 11 of figure 4**) being arranged in the drying zone. PILZ also discloses the nozzles of the drying fan being adjusted to preferred angles of 30° to 75° to optimize the heat recovery of the machine (**lines 22-27 of page 2 of the machine translation**). This angle adjustment functionality would require the nozzle to be pivotable, though PILZ does not appear to explicitly/expressly disclose the fan having pivotably designed nozzles.

57. However, RAGO ET AL. discloses a drying fan than has pivoting exit nozzles (**abstract, pivoting action best shown in figure 4**).

58. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ and WEIHE to include the drying fan with pivoting nozzles of RAGO ET AL., since one of skill in the art at the time of the invention would have known that the sweeping action created by pivoting nozzles would serve to enhance the drying speed and effectiveness.

59. With regard to claim **4**: PILZ discloses the nozzles of the drying fan being adjusted to preferred angles of 30° to 75° to optimize the extraction air flow volume of the dish washer system (**lines 22-27 of page 2 of the machine translation**). As such, varying the angle of the nozzle would cause differing quantities of air to be extracted from the drying zone.

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60. Furthermore, this claim limitation is merely intended use of the apparatus. The manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte Wikdahl* 10 USPQ 2d 1546, 1548 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889, 1891 (BPAI 1988); *In re Finsterwalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235, 238 (CCPA 1967)

61. With regard to claim **5**: WEIHE discloses the dishwasher being operated without clouds of steam at the inlet and outlet (**lines 66-69 of column 3**).

62. Furthermore, this claim limitation is merely intended use of the apparatus. The manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte Wikdahl* 10 USPQ 2d 1546, 1548 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889, 1891 (BPAI 1988); *In re Finsterwalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235, 238 (CCPA 1967)

63. With regard to claim **12**: RAGO ET AL. discloses the nozzles being pivoted by pneumatic and mechanical means (**mechanics shown in figure 4**).

64. With regard to claim **13**: RAGO ET AL. discloses the nozzles pivoting while the drying fan is in use (**abstract**).

65. Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ and WEIHE as applied to claims 1, 3, 7-11 above, and further in view of ANDERSSON (SE 9503485) (see English abstract made of record 10-28-09).

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66. With regard to claim **14**: PILZ discloses a heat pump (**element 151 of figure 4**) with an exhaust fan (**element 14 of figure 4**) that recovers heat from the exhaust air (**abstract**).

67. PILZ does not appear to explicitly/expressly disclose the exhaust fan to be a speed-regulated fan.

68. However, ANDERSSON discloses a ventilation control system which utilizes a speed-regulated fan (**abstract**).

69. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ to include the speed-regulated fan of ANDERSSON, since all the claimed elements were known in the prior art and since the speed-regulated fan would serve to decrease the noise level and energy use, as taught by ANDERSSON (**abstract**).

70. Claims **15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ, WEIHE, and RAGO ET AL. as applied to claims 3-5, 12-13 above; PILZ, WEIHE, and ANDERSSON as applied to claim 14 above; and further in view of ROBINSON (US 3,896,827).

71. PILZ discloses a heat pump (**element 151 of figure 4**) with an exhaust fan (**element 14 of figure 4**) that recovers heat from the exhaust air (**abstract**).

72. ANDERSSON discloses a ventilation control system which utilizes a speed-regulated fan (**abstract**).

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73. PILZ, WEIHE, RAGO ET AL., and ANDERSSON do not appear to explicitly/expressly disclose a fan or air nozzles being controlled based on a sensed temperature, moisture content, or presence of wash ware.

74. However, ROBINSON discloses a dishwashing machine that senses the presence of dishes, water temperature, water pressure, and detergent concentration to control the washing process (**abstract, lines 1-35 of column 2**).

75. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ, WEIHE, RAGO ET AL., and ANDERSSON to apply the control teachings of ROBINSON to a fan or air nozzle, since one of skill in the art at the time of the invention would have known that the use of automatic control, in response to sensor or user input, is commonly used in the dishwasher art to control washing, rinsing, sanitizing, and drying processes.

Conclusion

76. The objections to the drawings and specification, stated in the previous action, are hereby withdrawn.

77. The claim rejections under 35 USC 112, stated in the previous action, are hereby withdrawn.

78. Claims **4-5, 7-8, 10, 12-16** are newly rejected under 35 USC 112 as stated above.

79. Claims **1, 3-5, 7-16** stand rejected under 35 USC 103(a), as stated above; these rejections are hereby made FINAL.

80. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

81. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

82. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles W. Kling, whose telephone number is 571-270-5524. The examiner can normally be reached on Monday through Friday 8:00 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, Michael E. Barr, can be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Charles W. Kling/
Examiner, Art Unit 1711

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1711